

**REMARKS**

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

At the outset, appreciation is expressed to Mr. Boles, the Examiner in charge of this application, for taking the time to discuss this application during recent telephone conversations. Mr. Boles' originally telephoned the undersigned to discuss the Amendment filed on November 22, 2002. Mr. Boles stated that a claim defining the combination of features recited in Claims 22 and 23 would be allowable over the prior art. Thus, submitted with this Supplemental Amendment is new independent Claim 38 which generally sets forth the features recited in independent Claims 21 and 22, except for a few wording changes. The wording changes involve defining at least two grooves rather than a plurality of grooves and reciting that the air from the fan is fed into the single air vent and is directed at least into each of the at least two grooves. it is submitted that independent Claim 38 is allowable.

During the discussions with Mr. Boles, the undersigned also explained that the claimed seat apparatus defined in independent Claims 16, 21 and 26 differs from the disclosure contained in *Gallup et al.*, previously relied upon in the earlier Official Action, in that the seat disclosed in *Gallup et al.* does not include, in combination with the other claimed features, separate or spaced apart grooves in the same manner as in the present invention. Mr. Boles agreed that *Gallup et al.* and the prior art considered as a whole does not disclose or suggest a seat apparatus having such separate or spaced apart grooves for

purposes of, for example, directing temperature controlled air to desired places of the seat cushion or seat back such as where an occupant contacts the seat. To more clearly define this aspect of the invention, independent Claims 16, 21 and 26 were reworded and forwarded to Mr. Boles for consideration. After considering these claims, Mr. Boles indicated that such claims would be allowable over the prior art if submitted by way of a formal response.

Thus, submitted with this Supplemental Amendment are the amended versions of Claims 16, 21 and 26 discussed previously with Mr. Boles. Mr. Boles' attention is directed to several other wording changes that have been incorporated into the versions of new Claims 21 and 26 for purposes of consistency. The various recitations of the "plurality of grooves" and the "plurality of spaced apart grooves" have been changed to --at least two grooves-- or --at least two spaced apart grooves--. Also for purposes of consistency, the wording in several of the dependent claims has also been changed.

To assist the Mr. Boles, the attachment to this Supplemental Amendment identifies how new Claims 16, 21-23, 26, 27, 34, 36 and 37 presented in this Supplemental Amendment differ from the earlier versions of those claims presented in the Amendment filed on November 22, 2002. Additions to the earlier versions of the claims are noted with underlining while deletions are noted with bracketing.

The paper accompanying this Supplemental Amendment points out how the versions of new Claims 16, 21-23, 26, 27, 34, 36 and 37 have been changed relative to the versions of those claims submitted with the November 22, 2002 Amendment. The accompanying

paper also identifies examples of where support exists in the patent for the changes in claim wording in the aforementioned claims as well as for the wording in newly presented independent Claim 38.

Also submitted with this Supplemental Amendment is a Supplemental Declaration Under 37 C.F.R. § 1.175(b)(1) and a paper surrendering the original Letters Patent.

It is believed that this application is in condition for allowance and such action is earnestly solicited.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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**Attachment to Amendment dated March 14, 2003**

**Mark-up of Claims 16, 21-23, 26, 27, 34, 36 and 37**

16. A seat apparatus for directing temperature controlled air to an individual seated on the seat apparatus, comprising:

a sitting portion contacted by a seated individual seated on the sitting portion, the sitting portion including a filling member, the sitting portion possessing a sitting side adapted to face an individual seated on the sitting portion and an oppositely positioned non-sitting side, said filling member including at least three [separate] spaced apart grooves each extending over a limited surface area of the filling member on the sitting side, each of the at least three grooves being positioned to coincide with a portion of the sitting portion contacted by an individual seated on the seat apparatus;

a cover member encircling the filling member;

an air vent provided in the filling member and extending from adjacent the non-sitting side of the sitting portion towards the sitting side of the sitting portion, one end of said air vent opening toward the sitting side and communicating with said at least three grooves; and

a temperature controlled air producing device for producing temperature controlled air and directing the temperature controlled air into an opposite end of the air vent, with the temperature controlled air being directed through the air vent and into said at least three separate grooves to provide temperature controlled air to a seated individual in contact with the sitting side of the sitting portion.

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**Mark-up of Claims 16, 21-23, 26, 27, 34, 36 and 37**

21. A seat apparatus for directing temperature controlled air to an individual seated on the seat apparatus, comprising:

a seat cushion that includes a filling member, said seat cushion possessing a sitting side adapted to face towards an individual seated on the seat cushion and a non-sitting side;

a seat back that includes a filling member, the seat back possessing a sitting side adapted to face towards an individual seated on the seat back and a non-sitting side;

[a plurality of] at least two spaced apart grooves each extending over a limited surface area of the filling member of at least one of the seat cushion and the seat back, each of said [plurality of] at least two spaced apart grooves opening in a direction towards the sitting side of said at least one of the seat cushion and the seat back, each of the at least two grooves being positioned to coincide with a portion of the seat apparatus contacted by an individual seated on the seat apparatus;

a cover member encircling the filling member of at least one of the seat cushion and the seat back;

an air vent having one end communicated with said [plurality of] at least two spaced apart grooves such that said [plurality of] at least two grooves branch from said one end of the air vent;

a fan communicating with an opposite end of the air vent to direct air towards the air vent such that the air is fed into the air vent and is directed by way of said [plurality of]

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**Mark-up of Claims 16, 21-23, 26, 27, 34, 36 and 37**

at least two spaced apart grooves to selected portions of an individual in contact with the sitting side of said at least one of the seat cushion and the seat back; and  
an air temperature controlling device positioned between the fan and the air vent to control a temperature of the air directed to the air vent and into said [plurality of] at least two spaced apart grooves to provide temperature controlled air to the selected portions of an individual in contact with the sitting side of said at least one of the seat cushion and the seat back.

22. The seat apparatus according to Claim 21, wherein the [plurality of] at least two spaced apart grooves includes at least three spaced apart grooves each extending over a limited surface area of the filling member of said seat cushion, said air vent being a single air vent constituting the only air vent in the filling member of the seat cushion so that all air from the fan is fed into the single air vent and is directed into each of said at least three grooves.

23. The seat apparatus according to Claim 21, wherein said [plurality of] at least two grooves are provided in the filling member of the seat cushion, and including at least one groove extending over a limited surface area of the filling member of the seat back.

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**Mark-up of Claims 16, 21-23, 26, 27, 34, 36 and 37**

26. A seat apparatus for directing temperature controlled air to an individual seated on the seat apparatus, comprising:

a seat cushion possessing a sitting side adapted to face towards a seated individual and a non-sitting side;

a seat back possessing a sitting side adapted to face towards a seated individual and a non-sitting side;

at least one of the seat cushion and the seat back including a filling member;

[a plurality of] at least two spaced apart grooves each extending over a limited surface area of the filling member and opening in a direction towards the sitting side of the at least one of the seat cushion and the seat back, each of said [plurality of] at least two spaced apart grooves extending to selected portions of the filling member, each of the at least two grooves being positioned to coincided with a portion of the seat apparatus contacted by an individual seated on the seat apparatus;

a cover member encircling the filling member;

an air vent having one end communicated with the [plurality of] at least two spaced apart grooves such said [plurality of] at least two spaced apart grooves branch from said one end of the air vent;

a peltier element communicating with an opposite end of the air vent to control a temperature of air fed to the air vent and directed by way of said [plurality of] at least two

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**Mark-up of Claims 16, 21-23, 26, 27, 34, 36 and 37**

grooves to said selected portions of the filling member to provide temperature controlled air to an individual seated on said at least one of the seat cushion and the seat back.

27. The seat apparatus according to Claim 26, wherein the air vent in the filling member is a single air vent constituting the only air vent in the filling member, each of the [plurality of spaced apart] at least two grooves communicating with the single air vent.

34. The seat apparatus according to Claim 26, wherein each of the [plurality of] at least two grooves includes side walls and a bottom wall.

36. The seat apparatus according to Claim 21, wherein said at least two [plurality of] grooves are located in areas to which high pressures are applied by an individual seated on the sitting portion.

37. The seat apparatus according to Claim 26, wherein said at least two [plurality of] grooves are located in areas to which high pressures are applied by an individual seated on the sitting portion.

**EXPLANATION OF CHANGES TO CLAIMS AND ADDED NEW  
CLAIM, AND DISCUSSION OF EXAMPLES OF WHERE SUPPORT  
EXISTS IN THE DISCLOSURE OF U.S. PATENT NO. 6,062,641  
FOR SUCH CHANGES AND SUCH NEW CLAIM**

At the time this application for reissue was filed, patent Claims 1-15 were maintained in their original form and new Claims 16-34 were presented for consideration. The Amendment filed on November 22, 2002 did not cancel any of the patent claims and did not cancel any of the new claims presented at the time the reissue application was filed. In the Amendment filed on November 22, 2002, new dependent Claims 35-37 were presented for consideration.

The Supplemental Amendment submitted concurrently with this paper does not cancel any of the patent claims, does not cancel any of the new claims presented at the time the reissue application was filed, and does not cancel any of the new claims presented in the Amendment filed on November 22, 2002. The concurrently filed Supplementary Amendment presents one additional new independent claim, Claim 38. Thus, Claims 1-38 are pending in this application for reissue.

The Supplemental Amendment submitted concurrently with this paper presents versions of new Claims 16, 21-23, 26, 27, 34, 36 and 37 that differ from the versions of those claims under consideration at the time of filing of the Amendment submitted on November 22, 2002. The differences between the versions of new Claims 16, 21-23, 26, 27, 34, 36 and 37 presented in this Amendment and the versions of those same claims under consideration at the time of filing of the Amendment submitted on November 22, 2002 are discussed below. The discussion below also points out examples of where support exists in U.S. Patent No. 6,062,641 (the patent) for the changed language in new

Claims 16, 21-23, 26, 27, 34, 36 and 37, and also points out examples of where support exists in the patent for the language in new independent Claim 38.

#### **New Independent Claim 16**

New independent Claim 16 has been changed to recite that the at least three grooves in the filling member are spaced apart and positioned to coincide with a portion of the sitting portion contacted by an individual seated on the seat apparatus. Support for this change can be found in, for example, Figs. 3 and 4 of the patent, and the discussions at several places in the patent, including the paragraph bridging columns 3 and 4, the first full paragraph of column 4, lines 42-50 of column 4, and the last full paragraph of column 4.

#### **New Independent Claim 21**

One of the changes to new independent Claim 21 involves changing the recitation of "a plurality of spaced apart grooves" to --at least two spaced apart grooves--. Support for this wording can be found in, for example, Figs. 3 and 4 of the patent which illustrate at least two grooves in the filling member. Other recitations in Claim 21 of the "plurality of grooves" and the "plurality of spaced apart grooves" have also been changed in a similar way for purposes of consistency.

New independent Claim 21 has also been changed to recite that the at least two grooves in the filling member are positioned to coincide with a portion of the sitting portion contacted by an individual seated on the seat apparatus. Support for this wording can be found in, for example, Figs. 3 and 4 of the patent, and the discussions at several

places in the patent, including the paragraph bridging columns 3 and 4, the first full paragraph of column 4, lines 42-50 of column 4, and the last full paragraph of column 4.

### **New Dependent Claim 22**

New dependent Claim 22 presented in this Supplemental Amendment differs from the version of new dependent Claim 22 under consideration at the time of filing of the Amendment submitted on November 22, 2002 in that the recitation of the "plurality of grooves" has been changed to --at least two grooves-- for purposes of consistency with the changes to new independent Claim 21.

### **New Dependent Claim 23**

New dependent Claim 23 presented in this Supplemental Amendment differs from the version of new dependent Claim 23 under consideration at the time of filing of the Amendment submitted on November 22, 2002 in that the recitation referring to the "plurality of grooves" has been changed to --at least two grooves-- for purposes of consistency with the changes to new independent Claim 21.

### **New Independent Claim 26**

One change that has been incorporated into new independent Claim 26 here relative to the version of new Claim 26 presented in the Amendment filed on November 22, 2002 is that the recitation of "a plurality of spaced apart grooves" has been changed to --at least two spaced apart grooves--. Support for this wording can be found in, for example, Figs. 3 and 4 of the patent which illustrate at least two grooves in the filling member. Other

recitations of the "plurality of spaced apart grooves" or the "plurality of grooves" in Claim 26 have also been changed in a similar manner for purposes of consistency.

New independent Claim 26 has also been changed to recite that the at least two grooves in the filling member are positioned to coincide with a portion of the sitting portion contacted by an individual seated on the seat apparatus. Support for this wording can be found in, for example, Figs. 3 and 4 of the patent, and the discussions at several places in the patent, including the paragraph bridging columns 3 and 4, the first full paragraph of column 4, lines 42-50 of column 4, and the last full paragraph of column 4.

#### **New Dependent Claim 27**

New dependent Claim 27 presented in this Supplemental Amendment differs from the version of new dependent Claim 27 under consideration at the time of filing of the Amendment submitted on November 22, 2002 in that the recitation of the "plurality of spaced apart grooves" has been changed to --at least two grooves-- for purposes of consistency with similar wording changes in new independent Claim 26.

#### **New Dependent Claim 34**

New dependent Claim 34 presented in this Supplemental Amendment differs from the version of new dependent Claim 34 under consideration at the time of filing of the Amendment submitted on November 22, 2002 in that the recitation of the "plurality of grooves" has been changed to --at least two grooves-- for purposes of consistency with the changes to new independent Claim 26.

**New Dependent Claim 36**

New dependent Claim 36 presented in this Supplemental Amendment differs from the version of new dependent Claim 36 under consideration at the time of filing of the Amendment submitted on November 22, 2002 in that the recitation of the "plurality of grooves" has been changed to --at least two grooves-- for purposes of consistency with the changes to new independent Claim 21.

**New Dependent Claim 37**

New dependent Claim 37 presented in this Supplemental Amendment differs from the version of new dependent Claim 37 under consideration at the time of filing of the Amendment submitted on November 22, 2002 in that the recitation of the "plurality of grooves" has been changed to --at least two grooves-- for purposes of consistency with the changes to new independent Claim 26.

**New Independent Claim 38**

New independent Claim 38 presented in this Amendment defines a seat apparatus for directing temperature controlled air to an individual seated on the seat apparatus. Examples of where support exists in the patent for the recitations in new independent Claim 38 are identified in the table below.

<p>38. A seat apparatus for directing temperature controlled air to an individual seated on the seat apparatus, comprising:</p>	<p>Figs. 1-4; original patent Claim 1; column 1, lines 32-34.</p>
<p>a seat cushion that includes a filling member, said seat cushion possessing a sitting side adapted to face towards an individual seated on the seat cushion and a non-sitting side;</p>	<p>Figs. 1-4; column 2, lines 28-30.</p>
<p>a seat back that includes a filling member, the seat back possessing a sitting side adapted to face towards an individual seated on the seat back and a non-sitting side;</p>	<p>Figs. 1 and 4; patent Claim 4; column 4, lines 19-27.</p>
<p>at least two spaced apart grooves extending over a limited surface area of the filling member of at least one of the seat cushion and the seat back, each of said at least two spaced apart grooves opening in a direction towards the sitting side of said at least one of the seat cushion and the seat back;</p>	<p>Figs. 3 and 4; column 2, lines 38-44; and column 4, lines 19-27.</p>
<p>a cover member encircling the filling member of at least one of the seat cushion and the seat back;</p>	<p>Fig. 1; column 2, line 66-column 3, line 1; column 4, lines 37-38.</p>
<p>an air vent having one end communicated with said at least two spaced apart grooves such that said at least two grooves branch from said one end of the air vent, said air vent being a single air vent constituting the only air vent in the filling member of the seat cushion so that all air from the fan is fed into the single air vent and is directed at least into each of the at least two grooves;</p>	<p>Figs. 1, 3 and 4; column 2, lines 38-44; and column 4, lines 19-27.</p>
<p>a fan communicating with an opposite end of the air vent to direct air towards the air vent such that the air is fed into the air vent and is directed by way of said at least two grooves to selected portions of an individual in contact with the sitting side of said at least one of the seat cushion and the seat back; and</p>	<p>Fig. 1; column 3, lines 19-23; column 3, line 51-column 4, line 18; column 4, lines 19-34; column 4, lines 56-62.</p>

an air temperature controlling device positioned between the fan and the air vent to control a temperature of the air directed to the air vent and into said at least two spaced apart grooves to provide temperature controlled air to the selected portions of an individual in contact with the sitting side of said at least one of the seat cushion and the seat back.

Fig. 1; column 3, lines 15-35.